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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/734,163

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Kenji Sugiyama

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EXAMINER

CHIO, TAT CHI

ART UNIT

PAPER NUMBER

2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/734,163	SUGIYAMA, KENJI	
	<b>Examiner</b>	<b>Art Unit</b>	
	TAT CHI CHIO	2621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/29/2008 has been entered.

### ***Response to Arguments***

1. Applicant's arguments filed 2/29/2008 have been fully considered but they are not persuasive.

Applicant argues that Sugiyama et al. require temporal coding whereas claims 1 to 4 do not require such temporal coding, or the former performs two steps of coding (temporal coding and real coding) whereas the latter performs coding only once.

In response, the examiner respectfully disagrees. The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., > Mars Inc. v. H.J. Heinz Co., 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004) ("like the term comprising,' the terms containing' and mixture' are open-ended.").< Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364,

1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003) (“The transition comprising’ in a method claim indicates that the claim is open-ended and allows for additional steps.”); Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) (“Comprising” is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948) (“comprising” leaves “the claim open for the inclusion of unspecified ingredients even in major amounts”). >In Gillette Co. v. Energizer Holdings Inc., 405 F.3d 1367, 1371-73, 74 USPQ2d 1586, 1589-91 (Fed. Cir. 2005), the court held that a claim to “a safety razor blade unit comprising a guard, a cap, and a group of first, second, and third blades” encompasses razors with more than three blades because the transitional phrase “comprising” in the preamble and the phrase “group of” are presumptively open-ended. “The word comprising’ transitioning from the preamble to the body signals that the entire claim is presumptively open-ended.” Id.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al. (5,790,745) in view of Bailleul (US 6,201,844 B1).

**Consider claim 1**, Sugiyama et al. teach a method of controlling the amount of codes generated during re-coding in conversion of a first bitstream obtained by efficient coding of a moving-picture video signal to a second bitstream, the method comprising the steps of: extracting, from the first bitstream, information on code amount, as parameter indicating moving-picture coding difficulty (col. 12, lines 63-67 and col. 13, lines 1-3); obtaining an amount of quasi-generated codes which is estimated to be required for achieving a given picture quality, per given period, (col. 13, lines 5-9); adjusting the amount of quasi-generated codes for each of the given period to obtain a target code amount (col. 13, lines 39-56); assigning the target code amount to a given portion of the moving-picture video signal so that a total code amount of the given portion of the moving-picture video signal matches a recordable total code amount for a storage medium for storing the given portion of the moving-picture video signal (col. 13, lines 39-56); and re-coding the first bitstream while performing code amount control in accordance with the target code amount, thus converting the first bitstream into the second bitstream to be recorded in the storage medium (11 of Fig. 4 outputs a second bitstream and the second bitstream is to be recorded in the buffer 21 of Fig. 8), but Sugiyama et al. do not explicitly teach extracting, from the first bitstream, information on quantization, as parameter indicating moving-picture coding difficulty and the amount of quasi-generated codes is obtained based on a product of the code amount and a quantization level obtained from the information on quantization.

Bailleul teaches extracting, from the first bitstream, as parameter indicating moving-picture coding difficulty (col. 10, lines 43-65) and the amount of quasi-generated codes is obtained based on a product of the code amount and a quantization level obtained from the information on quantization (col. 10, lines 10-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to calculate the product of the code amount and a quantization level to represent the complexity of the picture.

**Consider claim 2**, Sugiyama et al. and Bailleul teach a moving-picture recording method comprising the steps of: recording a first bitstream obtained by efficient coding of a moving-picture video signal in a first storage medium, under code amount control for targeting a given fixed transfer bit rate (VTR of Fig. 4 records the first bitstream of Sugiyama et al.); extracting, from the first bitstream, information on code amount and information on quantization, as parameters indicating moving-picture coding difficulty (col. 12, lines 63-67 and col. 13, lines 1-3 of Sugiyama et al. and col. 10, lines 43-65 of Bailleul); obtaining an amount of quasi-generated codes which is estimated to be required for achieving a given picture quality, per given period, based on a product of the code amount and a quantization level obtained from the information on quantization (col. 13, lines 5-9 of Sugiyama et al. and col. 10, lines 10-27 of Bailleul); adjusting the amount of quasi-generated codes for each of the given period to obtain a target code amount (col. 13, lines 39-56 of Sugiyama et al.); assigning the target code amount to a given portion of the moving-picture video signal so that a total code amount of the given portion of the moving-picture video signal matches a recordable total code amount for a

second storage medium for storing the given portion of the moving-picture video signal (col. 13, lines 39-56 of Sugiyama et al); and re-coding the first bitstream to convert the first bitstream into a second bitstream having a variable bit rate while performing code amount control in accordance with the target code amount (Fig. 4 of Sugiyama et al); and recording the second bitstream in the second storage medium at the variable bit rate (11 of Fig. 4 outputs a second bitstream and the second bitstream is to be recorded in the buffer 21 (second storage medium) of Fig. 8 of Sugiyama et al).

**Consider claim 3**, Sugiyama et al. and Bailleul teach a moving-picture code amount control apparatus comprising: an information extractor to extract information on code amount and information on quantization, as parameters indicating moving-picture coding difficulty, from a first bitstream obtained by efficient coding of a moving-picture video signal (col. 12, lines 63-67 and col. 13, lines 1-3 of Sugiyama et al. and col. 10, lines 43-65 of Bailleul), and obtain an amount of quasi-generated codes which is estimated to be required for achieving a given picture quality, per given period, based on a product of the code amount and a quantization level obtained from the information on quantization (col. 12, lines 63-67 and col. 13, lines 1-3, and col. 13, lines 5-9 of Sugiyama et al. and col. 10, lines 10-27 of Bailleul); a target code amount setter to adjust an amount of quasi-generated codes for each of the given period to obtain a target code amount and assign the target code amount to a given portion of the moving-picture video signal so that a total code amount of the given portion of the moving-picture video signal matches a recordable total code amount for a storage medium for storing the given portion of the moving-picture video signal (col. 13, lines 39-56 of

Sugiyama et al); and an encoder to re-code the first bitstream while performing code amount control in accordance with the target code amount, thus converting the first bitstream into a second bitstream to be recorded in the storage medium (7 and 10 of Fig. 4 of Sugiyama et al).

**Consider claim 4**, Sugiyama et al. and Bailleul teach a moving-picture recording apparatus comprising: a first recorder to record a first bitstream obtained by efficient coding of a moving-picture video signal in a first storage medium, under code amount control for targeting a given fixed transfer bit rate (VTR of Fig. 4 of Sugiyama et al); an information extractor to extract, from the first bitstream, information on code amount and information on quantization, as parameters indicating moving-picture coding difficulty (col. 12, lines 63-67 and col. 13, lines 1-3 of Sugiyama et al. and col. 10, lines 43-65 of Bailluel), and obtain an amount of quasi-generated codes which is estimated to be required for achieving a given picture quality, per given period, based on a product of the code amount and a quantization level obtained from the information on quantization (col. 12, lines 63-67 and col. 13, lines 1-3, and col. 13, lines 5-9 of Sugiyama et al. and col. 10, lines 10-27 of Bailleul); a target code amount setter to adjust an amount of quasi-generated codes for each of the given period to obtain a target code amount and assign the target code amount to a given portion of the moving-picture video signal so that a total code amount of the given portion of the moving-picture video signal matches a recordable total code amount for a second storage medium for storing the given portion of the moving-picture video signal (col. 13, lines 39-56 of Sugiyama et al); a bitstream convertor to re-code the first bitstream while performing code amount control



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in accordance with the target code amount, thus converting the first bitstream into a second bitstream having a variable transfer bit rate (7 and 10 of Fig. 4 of Sugiyama et al); and a recorder to recode the second bitstream in the second storage medium at the variable transfer bit rate (21 of Fig. 8 of Sugiyama et al).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAT CHI CHIO whose telephone number is (571)272-9563. The examiner can normally be reached on Monday - Thursday 9:00 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571)-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. C. C./  
Examiner, Art Unit 2621

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621